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10/796,395

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Jong-Won Seo

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EXAMINER

ZHANG, SHIRLEY X

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/796,395	Applicant(s) SEO, JONG-WON	
	Examiner SHIRLEY X. ZHANG	Art Unit 4121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This non-final office action is responsive to the U.S. patent application no. 10/796,395 filed on March 9, 2004.

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy was filed with the U.S. application on March 9, 2004.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1-5, 7, 8, 13-16 and 18** are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. patent application publication 2004/0186918 to Lonnfors et al., hereinafter “**Lonnfors**”, in view of “RFC 3261, SIP: session initiation protocol”, hereinafter “**RFC 3261**”.

Regarding claim 1, Lonnfors teaches a method of starting an application program of a mobile terminal having a data terminating function, the method comprising the steps of:

receiving a call establishment request for data termination ([0035] discloses that the shared protocol stack 214 in Fig. 2 may communicate using SIP to receive incoming data; It is inherent within in the art that SIP is a call establishment protocol, as taught in RFC 3261);

establishing a data call according to the call establishment request ([0003] discloses that SIP as a signaling protocol assists digital devices in establishing end-to-end multimedia sessions, and providing other features such as presence and sending text and binary messages);

determining the type of service specified by an application program starting message, when the application program starting message is received after the call is established ([0036] discloses that a dispatcher is used to analyze incoming data to determine a destination for the data); and

automatically starting an application program corresponding to the determined type of service ([0043] discloses that other attributes can be included in the Generic Application Descriptor (GAD) such as security settings or the location of the executable file so a dispatcher 220 can automatically start the application).

Regarding claim 2, Lonnfors teaches a method of starting an application program of a mobile terminal as claimed in claim 1, wherein establishment of the data call is performed when a data terminating function is selected ([0027] discloses that data termination functions, i.e. applications such as SIP, HTTP or telnet, are selected based on the transport layer ports; [0035] further discloses that if data is received on port 5060, then establishment of a SIP session is performed).

Regarding claim 3, Lonnfors teaches a method of starting an application program of a mobile terminal as claimed in claim 1. Lonnfors further teaches a step of determining whether or not an appropriate application program corresponding to the type of service specified by the application program starting message exists in a memory of the mobile terminal ([0036]

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discloses that the dispatcher 220 may rely on an application descriptor registry 222 to make determinations of existing application and how to best deal with incoming data).

Regarding claim 4, Lonnfors teaches a method of starting an application program of a mobile terminal as claimed in claim 3, wherein the application program starting message includes:

a header for determining whether or not a received message is an application program starting message ([0042] discloses that the incoming data uses a Generic Application Descriptor (GAD));

type of service information (page 4, Listing 1 discloses that the GAD includes the attribute “App-Name” to identify the type of service requested);

type of transmission data information (page 4, Listing 1 discloses that the GAD includes the attribute “Content-type” to identify the type of transmission data);

service server access information (page 5, Listing 3 discloses that the JAD file entry “Midlet-push-1” identifies the service server access information); and

service server access protocol information (page 5, Listing 3 disclose that the JAD file entry “Midlet-supported-protocols” identifies the service server access protocol information).

Regarding claim 5, Lonnfors teaches a method of starting an application program of a mobile terminal as claimed in claim 1, wherein the application program starting message is received through a traffic channel formed in response to establishment of the data call ([0038] discloses that when a remote user wanted to initiate a chess game, the dispatcher 220 would receive notification of the incoming request on the reserved port, recognize the required application appropriate for the request by scanning the registry 222 and start the chess program;

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in the case that SIP is used as the network transport protocol, a traffic channel is formed at either the default port 5060 or a user requested port).

Regarding claim 7, Lonnfors teaches a method of starting an application program of a mobile terminal as claimed in claim 3. Lonnfors further discloses that the step of originating an absence message when no appropriate application program corresponding to the application program starting message exists in the memory of the mobile terminal and ending a call connection (paragraph [0035] disclose that the shared protocol stack 214 in Fig. 2 may communicate using SIP to receive incoming data; It is well known in the art, as is also taught RFC 3261, that SIP is a session initiation protocol that uses INVITE message to initiate a session, to which message responses such as “200 OK” messages or “300” and “400” error messages must be sent. A SIP error message is equivalent to the absence message recited in the claim, which also serves to end the call).

Regarding claim 8, Lonnfors teaches a method of providing service data to a mobile terminal in a mobile communication system, the mobile terminal having a data terminating function, the method comprising the steps of:

receiving a request for data transmission to the mobile terminal from at least one service server ([0058] discloses that when a dangerous weather condition is detected, the server 420 sends a SIP message);

generating an application program starting message for running one of at least one application program stored in the mobile terminal on the basis of the type of service data to be provided from the service server ([0058] discloses that the message generated by the weather

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server contains attribute descriptor carrying information about the type of service data to be provided from the service server, e.g. “application-type” is /WeatherSource/appl/alert);

transmitting a call establishment signal requesting data termination to the mobile terminal, wherein the call establishment signal allows transmission of the generated application program starting message to the mobile terminal([0058] discloses that the device 402 receives the incoming message from the weather server);

transmitting the application program starting message to the mobile terminal through a traffic channel, the traffic channel being formed upon the selection of data termination at the mobile terminal ([0038] discloses that when a remote user wanted to initiate a chess game, the dispatcher 220 would receive notification of the incoming request on the reserved port, recognize the required application appropriate for the request by scanning the registry 222 and start the chess program; in the case that SIP is used as the network transport protocol, a traffic channel is formed at either the default port 5060 or a user requested port); and

receiving service data of the service server at the mobile terminal by connecting the mobile terminal to the service server ([0060] discloses that the weather application can display the incoming data as an alert along with an animated map or other relevant data received from the weather server).

Regarding claim 13, Lonnfors teaches a method of starting an application program of a mobile terminal having a data terminating function, the method comprising the steps of:

receiving a call establishment request for data termination ([0035] discloses that the shared protocol stack 214 in Fig. 2 may communicate using SIP to receive incoming data; It is well known in the art that SIP is a call establishment protocol, as taught in RFC 3261);

establishing a data call according to the call establishment request ([0003] discloses that SIP as a signaling protocol assists digital devices in establishing end-to-end multimedia sessions, and providing other features such as presence and sending text and binary messages); and

automatically starting an application program corresponding to the type of service specified by the call establishment request ([0043] discloses that other attributes can be included in the GAD such as security settings or the location of the executable file so a dispatcher 220 could automatically start the application).

Regarding claim 14, Lonnfors teaches a method of starting an application program of a mobile terminal as claimed in claim 13, wherein establishment of the data call is performed when a data terminating function is selected by the mobile terminal ([0036] discloses that a dispatcher running on the mobile terminal is used to analyze incoming data to determine a destination for the data, i.e., to select a data terminating function).

Regarding claim 15, Lonnfors teaches a method of starting an application program of a mobile terminal as claimed in claim 14, further comprising a step of examining whether or not an application program corresponding to the type of service specified by the call establishment request exists in a memory of the mobile terminal ([0036] discloses that the dispatcher 220 may rely on an application descriptor registry 222 to make determinations of existing application and how to best deal with incoming data).

Regarding claim 16, Lonnfors teaches a method of starting an application program of a mobile terminal as claimed in claim 15, wherein the call establishment request includes

type of service information (page 4, Listing 1 discloses that the generic application descriptor (GAD) embedded in the incoming message includes the attribute “App-Name” to identify the type of service requested),

type of transmission data information (page 4, Listing 1 discloses that the GAD includes the attribute “Content-type” to identify the type of transmission data),

service server access information (page 5, Listing 3 discloses that the JAD file entry “Midlet-push-1” identifies the service server access information), and

service server access protocol information (page 5, Listing 3 disclose that the JAD file entry “Midlet-supported-protocols” identifies the service server access protocol information).

Regarding claim 18, Lonnfors teaches a method of starting an application program of a mobile terminal as claimed in claim 16, further comprising the steps of:

originating a service denial message when no appropriate application program corresponding to the call establishment request exists in the memory of the mobile terminal; and ending the call connection (paragraph [0035] disclose that the shared protocol stack 214 in Fig. 2 may communicate using SIP to receive incoming data; It is well known in the art, as is also taught RFC 3261, that SIP is a session initiation protocol that uses INVITE message to initiate a session, to which message responses such as “200 OK” messages or “300” and “400” error messages must be sent. A SIP error message is equivalent to the absence message recited in the claim, which also serves to end the call).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 6, 9, 10, 11, 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent application publication 2004/0186918 to Lonnfors, as applied to claims 5, 8, 16 above respectively, further in view of U.S. patent no. 7,076,244 to Lazaridis et al., hereinafter “Lazaridis”.

Regarding claim 6, Lonnfors teaches a method of starting an application program of a mobile terminal as claimed in claim 5.

Lonnfors does not explicitly disclose that the invoked application program attempts to access an application program starting server, but it does disclose in [0058] that the device 402 can be arranged that the processes receive messages forwarded from the dispatcher.

However, Lazaridis discloses a proxy content server coupled to information source, i.e. service server, and the wireless network. The function and location of the proxy content server is equivalent to that of the application program starting server disclosed by the present application.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Lonnfors and Lazaridis so that Lonnfors's network in Fig.4 will include an application program starting server. The fact that both Lonnfors and Lazaridis teach about system and method for pushing service information to a mobile device would have motivated one of ordinary skill to combine them.

Regarding claim 9, the combination of Lonnfors and Lazaridis teaches a method of providing service data in a mobile communication system as claimed in claim 8.

Lonnfors does not specifically disclose that the service server includes a stock server in which stock data are stored.

However, Lazaridis discloses in column 2, lines 34-41 that the content server 10a in Fig.1 provides information such as stock prices; therefore it is a stock server.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Lonnfors and Lazaridis so that the service server includes a stock server in which stock data are stored. One of skill would have been motivated to combine as such by the fact that Lonnfors discloses in [0055] that a user device contains a stock ticker application, and Lazaridis teaches using a content server to provide the said stock price information.

Regarding claim 10, the combination of Lonnfors and Lazaridis teaches a method of providing service data in a mobile communication system as claimed in claim 8.

Lonnfors does not specifically disclose that the service server includes an advertisement server in which advertisement data are stored.

However, Lazaridis discloses that the system includes advertising servers 10b, as shown in Fig. 1 and the ad contents such servers provide.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Lonnfors and Lazaridis so that the service server includes an advertisement server in which advertisement data are stored. One of skill would have been motivated to combine as such by the fact that both Lonnfors and Lazaridis teach about a method and system of providing content services to mobile devices, and it is in the knowledge generally available to one of ordinary skill to introduce advertisement services taught by Lazaridis into such a system.

Regarding claim 11, the combination of Lonnfors and Lazaridis teaches a method of providing service data in a mobile communication system as claimed in claim 8.

Lonnfors does not specifically disclose that the service server includes a messenger server for providing an instant message service.

However, Lazaridis discloses in column 2, lines 34-41 that the content server 10a in Fig.1 provides information such as instant messaging information; therefore it is a messenger server.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Lonnfors and Lazaridis so that the service server includes a stock server in which stock data are stored. One of skill would have been motivated to combine as such by the fact that Lonnfors suggests in [0035] that SIP may be used to provide instant messaging functionality, and Lazaridis teaches in column 2, lines 40 of using a content server to provide the said instant messaging information.

Regarding claim 17, Lonnfors teaches a method of starting an application program of a mobile terminal as claimed in claim 16.

Lonnfors does not explicitly disclose that the invoked application program attempts to access an application program starting server, although it does disclose in [0058] that the device 402 can be arranged that the processes receive messages forwarded from the dispatcher.

However, Lazaridis discloses a proxy content server coupled to information source, i.e. service server, and the wireless network. The function and location of the proxy content server is equivalent to that of the application program starting server disclosed by the present application.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Lonnfors and Lazaridis so that Lonnfors's network in Fig.4 will include an application program starting server. The fact that both Lonnfors and Lazaridis teach about system and method for pushing service information to a mobile device would have motivated one of ordinary skill to combine them.

4. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent application publication 2004/0186918 to Lonnfors as applied to claim 8, in view of U.S. patent no. 7,149,508 to Herle.

Regarding claim 12, Lonnfors teaches a method of providing service data in a mobile communication system as claimed in claim 8, further comprising the steps of:

receiving an absence signal from the mobile terminal, indicating that no appropriate application program corresponding to the type of service specified by the application program starting message exists in a memory of the mobile terminal (paragraph [0035] disclose that the shared protocol stack 214 in Fig. 2 may communicate using SIP to receive incoming data; It is well known in the art, as is also taught RFC 3261, that SIP is a session initiation protocol that uses INVITE message to initiate a session, to which message responses such as "200 OK"

messages or “300” and “400” error messages must be sent. A SIP error message is equivalent to the absence message recited in the claim, which also serves to end the call);

Lonnfors does not disclose the step of transmitting a download request message to the mobile terminal, requesting that the mobile terminal download an appropriate application program.

However, Herle discloses in column 7, lines 22-26 that the OTA upgrade procedure may be initiated on the receipt of a notification message from upgrade server, i.e., the upgrade server transmits a download request message to the mobile device request that the mobile device download appropriate software.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine Lonnfors and Herle so that server transmits a download request message to the device to request the mobile to download. One would have been motivated to do so because in Lonnfors, if an application for processing the incoming data was not found, there existed a need to report the problem to the server, and Herle taught how the server could have request the mobile device to download appropriate software over the air, which would have satisfied Lonnfors's need, therefore such combination would have been desirable and would have yielded predictable results.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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US 7248861 B2 Lazaridis; Mihal et al. System and method for pushing information to a mobile device;

US 7079839 B1 Papineau; Scott Method and system for push launching applications with context on a mobile device;

US 7092703 B1 Papineau; Scott Method and system for accessing a universal message handler on a mobile device;

US 20040205233 A1 Dunk, Craig A. System and method for addressing a mobile device in an ip-based wireless network;

US 7275243 B2 Gibbons; Bill et al. Mobile download system;

US 20040098715 A1 Aghera, Parixit et al. Over the air mobile device software management;

US 20050022182 A1 Mittal, Gaurav System, and associated method, for downloading an application;

US 7149510 B2 Hansson; Jonas et al. Security access manager in middleware;

US 6628965 B1 LaRosa; Mark I. et al. Computer method and system for management and control of wireless devices;

US 6999749 B2 White; Christopher Conditional application invocation in a wireless device;

US 7190949 B2 Tsuda; Masayuki et al. Mobile communication terminal, application software initiating apparatus, application software initiating system, application software initiating method, and application software initiating program;

US 20020072355 A1 Jeong, Gi-O et al. Method for distributing application software in mobile communication system;

US 20050059379 A1 Sovio, Sampo et al. Method of initializing and using a security association for middleware based on physical proximity;

US 20060129628 A1 Kamiya; Dai et al. Portable terminal, methods, programs and storage media for managing application start;

US 20040215711 A1 Martin, Bruce K. JR. et al. Mobile services platform architecture;

US 20030065738 A1 Yang, Victor Shiang et al. Wireless information systems and methods;

US 20060035655 A1 Lonnfors; Mikko et al. System and method for application distribution;

US 7139551 B2 Jamadagni; Nanjunda Swamy Satish System and method for automatically downloading software applications to a remote terminal;

KR 2005122612 A CHANG, S W et al. Offering application service among mobile communication terminals via Bluetooth (RTM) network, offering application services such as network game, name card delivery, and address list transfer among terminals;

KR 2002009685 A CHOI, C H et al. Method for automatically executing application program of wireless mobile communication terminal using wap;

US 6549770 B1 Marran; Nadine Over the air programming and/or service activation;

US 7149508 B2 Herle; Sudhindra P. System and method for delta-based over-the-air software upgrades for a wireless mobile station;

US 20020111987 A1 De Jong, Eduard Karel Data exchange system comprising portable data processing units;

US 20020129041 A1 Anderson, Jay R. et al. Function/service based automatic import/distribution of data;

US 20030028669 A1 Batsleer, Claudine et al. Method and system for routing logging a request;

US 20060252435 A1 Henderson; Irvin et al. Enabling application wakeup on a mobile device with a hybrid client;

Günther Pospischil, Johannes Stadler, Igor Miladinovic, "A Location-based Push Architecture using SIP", 4th International Symposium on Wireless Personal Multimedia, 2001;

"Push OTA Protocol" published by Wireless Application Protocol Forum, Version 25, April 2001;

Enrique Ortiz, "The MIDP 2.0 Push Registry", Sun Microsystems, January 2003;

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHIRLEY X. ZHANG whose telephone number is (571)270-5012. The examiner can normally be reached on Monday through Friday 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on (571) 272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George C. Neurauter, Jr./
Primary Examiner, Art Unit 2143